



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,168	01/13/2004	Gunter Hintenlang	8470G-000004	2113
27572	7590	03/30/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			PATEL, VISHAL A	
		ART UNIT		PAPER NUMBER
				3676

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/756,168	HINTENLANG ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Vishal Patel	3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 12 November 2004.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-8, 10 and 11 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8, 10 and 11 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

### *Drawings*

1. The drawings were received on 11/12/04. These drawings are accepted by the examiner and approved by the examiner.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch (Us. 6,367,810) in view of GB 1,299,685.

Hatch discloses a sealing ring (sealing ring of figure 2) comprising a supporting ring (58) connected with a first sealing lip (71) made of an elastomeric material and a second sealing lip (59) made of a polymeric material. The second sealing lip being wedged against the supporting ring by a clamping plate (64) without being bound to it. The clamping plate for purposes of precentered installation of a machine element (shaft 55) that is to be sealed into the sealing lip, the clamping plate being provided with an insertion end (end of 65 or 66) in a direction opposite to that of an installation direction of the machine element (the insertion end 65 and 66 are on opposite of the insertion direction of the machine element because the shaft is inserted to the left of the page since the figure 2 so that the lip 71 and 59 are bent or deformed by the shaft) and of the first sealing lip (the ends are opposite of the first sealing lip). The second sealing lip acts as a second centering ring for further precentered installation of the machine element and being

located after the first sealing lip in the installation direction, and acting as preliminary seal for the first sealing lip (this would be the case since the shaft is installed by moving the shaft toward the left). The clamping plate is axially open in the direction opposite to that of installation (the clamping plate is open in the direction opposite to that of installation). The first sealing lip is precurved axially in the installation direction and axially in the direction of a space to be sealed, the second sealing lip is precurved in the installation direction and axially in the direction of the first sealing lip.

Hatch disclose the invention substantially as claimed above but fail to disclose that the clamping plate has an insertion slant having a diameter that increases in funnel-like fashion axially and the clamping plate is C-shape. GB '685 discloses a clamping ring that has an insertion slanted (7') that increases in funnel-like fashion axially and having a C-shape (the ring will have a C-shape when the slanted portion is placed or provided in the Hatch reference). It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the clamping ring of Hatch to have an insertion slant having a diameter that increases in funnel-like fashion axially which forms the C-shape as taught by GB '685 to provide free passage of the shaft during assembly so as to avoid damage to the sealing lips (page 2, column 1, lines 10-18 of GB '685).

3. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch and GB '685 as applied to claim 1 above, and further in view of Nagasawa (US. 4,623,153).

4. Hatch and GB '685 disclose the invention substantially as claimed above but fail to disclose that the supporting ring has an essentially T-shape and a statically loaded seal on an outer periphery of the support ring. Nagasawa teaches to have a supporting ring that is made

into a U-shape (figure 1 of Hatch and similar shape as the supporting ring of Hatch) or the supporting ring is made into a T-shape and has a statically loaded seal on its outer periphery. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the supporting ring of Hatch to be T-shape and to have a statically loaded seal on its outer periphery as taught by Nagasawa, to provide a T-shape or U-shape support ring is art equivalent and to provide a static seal between the housing and the support ring (figures 1-4 of Nagasawa)

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch and GB '685.

Hatch and GB '685 discloses the claimed invention except for the metal to be spring steel. It would have been obvious to one having ordinary skill in the art at the time the invention was made to having the clamping ring to be formed of spring steel, since it has been held to be within the general skill of a worker in the art to select a know material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

#### *Response to Arguments*

Applicant's arguments with respect to claims 1-8 and 10-11 have been considered but are moot in view of the new ground(s) of rejection.

#### *Conclusion*

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford, can be reached on (703) 308-2978.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

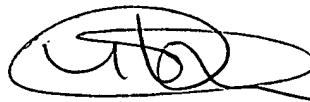
**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:** 703-872-9326, for formal communications for entry before Final action; or, 703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP  
March 18, 2005



Heather Shackelford  
Supervisory Patent Examiner  
Tech. Center 3600